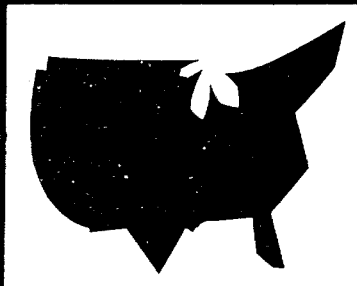


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PAPER: "Medicine in the 1970's"
by Stanley W. Olson, M.D.

December 16, 1968

Because it looks at what he describes as some of the "major trends in the health field, and traces some of the patterns discernible in this complex field," this paper given by Dr. Stanley W. Olson, Director of the Regional Medical Programs Service, at the Mountainside Hospital Convocation in Montclair, New Jersey on November 21, 1968 will be of interest to those involved in or working with Regional Medical Programs.

MEDICINE IN THE 1970's*

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"There goes many a ship to sea, with many hundred souls in one ship, whose weal and woe is common, and it is a true picture of a commonwealth, or a human combination or society"--the words of Roger Williams, one of our founding pioneers as he began a letter to the townsmen of Providence.

The occasion which brings us together represents a milestone in the history and development of the Mountainside Hospital. Its trustees, physicians, administration, and staff are proposing to go to sea in a new ship and to embark on a new course. They have invited leaders of the community they serve, whose weal and woe is common, to share the excitement and responsibility of their new undertaking. You who have engaged yourself in this endeavor are determined that you will expand your hospital to make it adequate to the needs of the people who bring you their medical problems; you have identified the broader community into which your influence can and should be projected; you have set your face to an uncertain future, and you would be less than human if you did not have concerns that your planning--sound as you can make it--may somehow fail to anticipate the changes of the decade ahead. I wish my limited wisdom could relieve you of some of that anxiety, but I fear I am much too weak a reed on which to lean. I can only look with you at the major trends in the health field and trace some of the patterns discernible in this complex field.

It would be strange indeed if you did not take pride in your record of having brought to this community the benefits of some of the great scientific achievements of medicine. With your new facility completed, you will be able to serve that purpose even more effectively. The array of medical advances from which you will select those to be carried out in your hospital will become more numerous as the tremendous medical research capability of this Nation, forged in the 50's, and reaching a high level of performance in the 60's, continues to offer new ways to solve disease problems.

Here are some of the items which may be over the horizon in the decade ahead:

The virtuoso performance of the surgeons and their skilled teams will continue to astound us as they move from one peak of accomplishment to the next. We can expect that the miracles of organ transplantation

* Delivered at Convocation of Mountainside Hospital, Montclair, New Jersey, November 21, 1968.

will continue. The major limiting factor will be the availability of donor organs, and our ability to stave off the rejection phenomenon. We shall expect to see some results from our efforts in artificial organ research, and we hope the availability of artificial replacements will help us out of this particular dilemma.

Our research laboratories will place in our hands new drugs to cope with problems that lie far beyond the surgeon's reach--antivirus agents to match those that are now taking the measure of bacterial diseases; anticancer agents, for a few specific cancers, to slow down or eliminate the uncontrolled proliferation of cells which brings about the spread of cancer throughout the body; and new vaccines to prevent infectious diseases. We can scarcely hope for success so dramatic as that which eliminated poliomyelitis, but the rubella vaccine and others will bring a large measure of protection, especially to the newborn.

New ways surely will be found to measure abnormalities in the blood and in other body fluids; to detect through the amplification of electrical discharges, evidences of disease in heart, brain and muscle; to outline in remote crevices of the body, by X-ray and other newer techniques such as xerography, thermography and ultra sound, the distortions produced by infection or tumors. All can be expected to make diagnosis more certain, and treatment more specific.

New and better anesthetic techniques and agents will limit the hazards associated with that twilight journey the patient must take if he is to benefit from the triumphs of surgical repair. The dangers to both mother and child at childbirth will be reduced as we understand how to control pain with greater safety.

Were I to depart now from the cautious approach I have used in predicting which might be in store for medicine in the 70's, I could sketch even more majestic vistas of medical achievement. But I may have gone too far already in playing the game we all find so attractive. It is a wholly human motive that impels us to use our new-found powers of science, technology, and organization to overcome and defeat the enemy disease which has so often defeated us in the past. And, in the flush of that victory, we can even make ourselves believe that we shall be spared the need to re-order our economic priorities as we move to extend to all a share in the triumphs of medical advance. Look at the polio story. See how relatively easy and inexpensive was that miracle. Therefore, let us have more instant solutions to complex problems!

Realistically, however, I must tell you we are creating remedies for which our resources are inadequate. Let me illustrate with the single problem of the treatment of end-stage renal disease. We now have the means to prolong the lives of those whose kidneys can no longer eliminate the wastes of the body's metabolism. To some we can offer the hope of kidney transplantation, a procedure that has become more and more successful as

we have learned how to match donor and recipient, much as we match blood for transfusion. To others we can offer the prospect of washing the waste out of the blood through the intermittent use of the artificial kidney apparatus. Most often this treatment requires that the patient be hospitalized every few weeks at first, but as the kidneys fail completely, more frequently until it becomes a three to four day cycle. The cost of such repeated hospitalization becomes enormous. Home dialysis holds out some prospect of some economy in the process, but even here the costs are high.

And how high are they? The true costs are not easy to determine but they vary from \$8,000 to \$25,000 annually for each patient, with an average of about \$15,000. Our information suggests that there are about 60,000 people who go into kidney failure each year. Of this number, some 10,000 are thought to be medically suitable for transplant or dialysis. Were each of the latter group to have his life extended by these means, it would cost in excess of \$150 million per year just for the newly added cases. For the large group which cannot receive a transplanted kidney, that cost would continue to be added year after year with an annual national cost of perhaps one-half billion dollars. The possibility always exists, however, that we may find ways to bring down the cost of supportive procedures through new discoveries and we should continue our search for new approaches to currently unsolved problems.

We might face up, as a nation, to the huge costs of a single major illness such as the one I have described. But what shall we do if we find ways to deal with the failing heart as we have with the failing kidney?--Or the emphysematous lung that can no longer adequately handle the exchange of oxygen and carbon dioxide?--Or the liver whose function is so diminished that it will no longer support life? When solutions to problems like these existed only in the minds of visionary scientists, we could afford the luxury of anticipating the universal benefits that success in their efforts would bring to us. But now that the probability of success is on our doorstep, we may find that we have won a Pyrrhic victory.

Over and above the special purposes to be served by philanthropic dollars for which there will always be increasing and important needs, the ongoing budget problems faced by the voluntary institutions, alone or in combination with Federal, State and local governments, have become enormous. We have come to place on our tax dollars greater and greater demands for those high priority activities on which our national security and continued productivity depend--defense, agriculture, highways, education, health -- and we know all too well the staggering backlog of unique problems which have piled up in our urban areas which are virtually untouched. It is unlikely, therefore, that we can accord priority in our tax-supported budgets to the prolongation of life for all through expensive new techniques.

But are there alternate mechanisms such as health insurance? We look increasingly to the use of catastrophic illness insurance to meet just such

needs as I have described. The problem here, however, is that the premium rates are reasonable only when the ratio of use to total coverage is small. As costs of care rise, and as elaborate life-prolonging procedures are made more readily available to a large number of persons, we shall find in this mechanism no better solution than that available through the tax route. And were the funds, through great sacrifice, made available, we would, in all probability, lack the health manpower the effort would require.

Let me not be misunderstood, however. We can, as a nation, afford to explore new means of saving and prolonging life. Let me put it even more forcefully. We cannot afford not to continue these efforts! We have seen too many children with congenital heart disease set on the road to a productive life to be pessimistic about the economic benefits of open heart surgery, and too many persons with thyroid disease spared the necessity of a surgical procedure by the use of medical treatment to be pessimistic about the benefits that will emerge from the laboratory. But as our ability to prolong life improves, we shall have an increasing number of persons with failing organs, and we cannot spend our whole economic and medical substance in a vain effort to prolong life for all.

We need a more balanced approach. We need, as Greer Williams, a former science writer and currently a member of the faculty of Tufts University School of Medicine, has recently pointed out in The New England Journal of Medicine,¹ a new strategy for promoting the understanding and support of health, "The focus of communications on dramatic research" he says, "draws attention away from the function of the doctor and nurse that, over time, has been most honored. This is attending the sick. It is where the health professions began; modern science, specialization and the rise of hospital-based technology have not changed this ancient function, but in fact have intensified the need for it."

He might well have added that some health publicists and writers have focused their attention so single-mindedly on the scientific achievements of our large medical centers that they have failed to report adequately what has been going on under their very noses in the community hospitals. And what is going on is a revolution as dramatic as that which brought the care of the patient out of the home and into the hospital three-quarters of a century ago. The hospital is not only a professional health service center where doctors perform their most complex tasks, but is now becoming a community health service center as well. As this added function gradually achieves higher priority in the years ahead, hospital organization, services and administration will undergo dramatic changes.

Dr. John Knowles, Medical Director of the Massachusetts General Hospital, gave a splendid address to the Association of American Medical Colleges recently.² In it he summarized some of the major problems affecting our health care system: problems of inadequate manpower; inadequate distribution of that manpower; fragmentation and disassociation

between medical centers and the rest of the health care system; problems posed by the staggering load of health services required to bring the health of the people in our urban ghettos up to the national norm. He concluded his address with these remarks:

"I believe we are approaching the end of a great cycle in American Medicine which began with the Flexner Report and has seen an incredibly successful and beneficial expansion of science and technology in the life of the doctor, his institutions, and his patients. We are beginning a new cycle which will see us pay equal attention to the social problems of medicine. Our successes in utilizing our magnificent body of knowledge will be no less demanding, no less rewarding, and no less exciting than its acquisition has been over the past 50 years."

Hospitals are rapidly becoming aware of their role in the wider utilization of health services. The American Hospital Association has emphasized that role; it says:

"The hospital with its medical staff is now the major health resource in most communities ... Each hospital ... through its governing body, medical staff, and administrator, has a clear mandate continuously to examine its organization and facilities in the light of this central role of coordinating the principles of optimum health services."³

One need only look to the phenomenal growth of services provided the public through the emergency room of the hospital to recognize that the public has already recognized the changing role of the hospital.

But the changing role of the hospital has a connotation, not so readily perceived by either lay public or by the health profession. That role relates to prevention of illness and promotion of positive health, or quality of life, if you will. It is a change with which neither the public nor the profession is yet entirely comfortable. It is a changing function, which the hospital, as presently organized and financed, finds itself ill-prepared to serve. It is a function, the success of which will depend upon new relationships, new organization, and new funding mechanisms.

"Every change rings the knell of something old and familiar." This mournful wisdom of Browning applies to medicine no less than to other aspects of our life. The something old and familiar which has died is the luxury of operating our hospitals in splendid isolation from the community.

An example of what is afoot is given in a paper published by The Journal of the American Medical Association in September of this year. Dr. John J. Butler⁴ describes the plan to coordinate the work of five hospitals to create The Catholic Medical Center of Brooklyn and Queens. He states the purpose of this major re-organization:

"The hospital must go beyond the concept of merely providing inpatient care; its aim is to provide comprehensive care to the neighborhood. This includes not only emergency room, ambulance service, and outpatient facilities, but outreach through satellite clinics and home care."

In 1965 the Congress enacted a series of laws which affect nearly every segment of the health care system and especially the community hospital. These legislative acts include Medicare, directed toward the health needs of the elderly; Medicaid, directed toward the provision of comprehensive health services for the medically indigent; a Comprehensive Health Planning Act which enables the various state and local governments and voluntary institutions in cooperation with physicians, nurses and others engaged in the provisions of health services to plan cooperatively for the growing health needs of our people; and the Heart Disease, Cancer and Stroke Amendments to the Public Health Service Act which created Regional Medical Programs, which provides an organizational means for raising the quality of diagnosis and treatment of these diseases and making the benefits of these improvements more readily available to the patients. Clearly foreseen in all of this legislation, was the added burden that would be placed especially on community hospitals to serve the needs of our elderly population and to bring into the mainstream of the health care system those others who have been served so long through a separate charity system of health care.

This legislative sequence represented a deliberate decision on the part of the Congress to maintain the voluntary, pluralistic approach to health care, by building on the strength of our existing systems and by providing mechanisms to extend it to include the needs of all people. This legislation signaled the start of a slow process to dismantle and restructure the physical and financial apparatus that has required the indigent to receive their health care in a manner different from those able to purchase their own health services. But it was well recognized that simply placing health purchasing power in the hands of those who previously had no such power would not of itself create the health services needed. It was necessary also to plan comprehensively to assure the quality and availability of care; to plan specifically for the facilities and the organization to deliver that health care; and for its financing. Only in this way could we properly accommodate a growing population and the persons who are to be newly incorporated into our single voluntary health care system.

There was and is a large question in the minds of the health professionals as to what kind of planning is implied. Is there to be a national blueprint which will determine where our medical centers shall be located and what types of care are to be given in them? Are there to be statewide plans which will designate what communities shall have intermediate size hospitals and what communities are to be limited in their activities? Are patients with complex illnesses to be referred to more sophisticated centers in the name of improved efficiency and economy? These are legitimate questions and they have been asked, and asked repeatedly. The answer is clear! Even if we knew enough to draw such blueprints--which we do not--this method of procedure is so foreign to the American tradition that it would fail if for no other reason than for lack of acceptance. What, in fact, is intended is that planning shall be accomplished community by community, neighborhood by neighborhood, hospital by hospital, and doctor by doctor, not for the consumer but with him.

The emphasis in this kind of planning, which is often referred to as process planning, is on the creation of a dynamic system which responds promptly to change; on the involvement in planning of all who are affected by the decisions reached; and on setting realistic goals and structuring practical programs to accomplish these goals. But while these programs are being implemented the planning process continues for the simple reason that change is constantly taking place, and we can no longer afford the luxury of believing at any stage in our development that we "have arrived."

It is human frailty that leads us to think of our own needs first. It is human pride that leads us to believe that, if we plan the best kind of hospital we can, the people will use it, and we shall have discharged our responsibility to the community. We appoint on our health planning boards persons who have established a reputation for public service, who can think clearly about major issues, and who have had experience with hospitals and health agencies. Persons with these qualities are scarce in any community. We impose heavy obligations on them. But where are the representatives of the people whose health care needs are the greatest? Is it reasonable that we should be planning to provide care for people without their knowledge or consent, or without assurance that their needs will be met? Our planning may even improve care for certain groups of people who already have the best available, while ignoring the reality that others have little or no care at all. We have ignored for too long the invisible element in our society. This practice is getting us into deeper trouble than we have ever experienced as a nation. The principle of involvement of all groups for planning relates not only to health, but to education, transportation, recreation, and every other phase of community action.

The comprehensive health planning program, known as "Partnership for Health" is intended to deal at the local level, specifically with

facilities for the organization for delivery of health care, including components of health manpower and financing.

But it is readily recognized that health care is more than a matter of facilities, financing, and organization. There is another important element--the substantive nature of the care to be delivered--that must also be considered. The means for insuring that the substance of care available at the local level will reflect the advances being made in our research laboratories, hospitals, and clinics involves quite a different but related mechanism to that which insures an adequate setting for the delivery of care. Bringing these advances to the patient at the community level, it was judged, could best be accomplished by a regionalized cooperative arrangement functioning among medical schools, hospitals, physicians and other voluntary and public agencies also concerned with personal health services. The issues to be decided in structuring such a regionalized arrangement, while of interest to the lay person and consumer, are predominately matters requiring professional judgment. Primary leadership and direction of this program, therefore, is appropriately placed in the hands of those actively engaged in providing personal health care. The chief role of the consumer in this undertaking is to insure that the narrow self interest of health care providers does not warp the effectiveness of a mechanism so essential to the improvement of the quality of care. This is the program we know as Regional Medical Programs for heart disease, cancer, stroke, and related diseases. This is the program I have the honor to direct for the U. S. Public Health Service. Fifty-four Regional Medical Programs have been established for planning purposes within the country. One of these is the New Jersey Regional Medical Program. They range in size from what have been called "health market areas" of single metropolitan communities to single states and combinations of states or sections of them. The limits of each Region are defined by its own people. These Programs are concerned with improved health care and health status of the individual. They are concerned with the upgrading of the skills and services of those who provide care. Categorically oriented, they have a strong technological bent, they are a means for insuring the widest use of the latest advances in heart disease, cancer, stroke. They are concerned with linking as well as strengthening health resources, a linkage which is the essence of regionalization.

Thus, Regional Medical Programs have emerged on the health scene as a voluntary mechanism that depends on the organizational behavior of health related institutions, a "coalition politics of health," if you will. Regional Medical Programs though Federally supported are intended to strengthen voluntary institutions and organizations of our country in their effort to develop local resources to meet local needs.

Medicine in the 70's then will see us responding, community by community, to find ways of utilizing medical knowledge more effectively, and of making it more broadly available. We shall do this by making sure

that we do not, through rigid financing mechanisms, force expensive hospital care on the patient when ambulatory care would serve the purpose equally well. We shall avoid expensive duplication of facilities; we shall work together to achieve better standardization of laboratory and x-ray procedures, again to avoid duplication; we shall obtain more accurate health data and find ways to analyze it rapidly to tell us what procedures are most effective; and not surprisingly, we shall find that the patient himself will represent a major health resource, a resource we have not tapped nearly enough.

I should like to share with you a story which John Danielson, Executive Vice President of the Evanston (Illinois) Hospital, tells, which illustrates a final point I should like to make. Mr. Danielson recently spent six months in England studying the reorganization of hospital services. One day while standing in the hall talking with the Administrator of a small regional hospital, he observed a Sister coming down the corridor wheeling a patient to surgery. (The Sister, in the British system is a nurse in charge of a ward and a person who holds considerable responsibility.) Danielson asked the Administrator why the Sister herself was pushing the surgical cart instead of delegating this task to a porter. The Administrator replied that he did not know but would find out. As the Sister approached he stopped her and repeated the question which Danielson had just asked. Her answer went something like this: "This man came into my ward yesterday. He was most apprehensive about the surgical procedure to be performed on him this morning. The trip he is now taking from my ward to the operating room may be, for him, the most important trip he shall ever take in his whole life. I should no more think of abandoning him on this journey than of abandoning the rest of the patients on my ward, who, by the way, are adequately supervised in my absence, thank you. I was not aware until you raised the question that I was wheeling this trolley, but now that you mention it, obviously a porter should be doing it. But it will make no difference as far as I am concerned because I shall still insist on remaining with my patient when he goes to surgery." She then proceeded on with the patient and the Administrator turned to Danielson and said, "Now see what you have done. I shall have to get a porter to push the trolley when Sister takes patients to surgery. Sometime soon we shall be visited by an efficiency expert. He will observe two people accompanying patients to surgery when one would suffice. He will examine the wage scale of each and come to the logical conclusion that it would be cheaper for the porter to accomplish this task than for Sister to do it. Then we shall have poorer patient care rather than better."

We are faced with a paradox. As the possibilities of patient care improve through advances in knowledge and technology, organization becomes more complex, care becomes more fragmented and the individual patient has greater difficulty in availing himself of that care.

"One of the essential qualities of the clinician," Dr. Francis Peabody wrote in 1927, "is interest in humanity, for the secret of the care of the patient is in caring for the patient."⁵

If we lose that sense of caring for our patients, the benefits of medical research will have lost their object; hospitals will be hotels for the sick, and our programs for planning and extension of care will be largely bereft of their humanistic meaning.

If the contemporary forces of dissent in our society are saying anything intelligible, it is that humans are individuals and that they count for something. Physicians and nurses have believed this for a very long time. Let us not forget it now, in the 1970's, or ever.

I close my remarks with the phrase Roger Williams used to conclude his letter to the townsmen of Providence. "This, if seriously and honestly minded, may, if it so please the Father of lights, let in some light to such as willingly shut not their eyes."

REFERENCES

1. Williams, Greer, "Needed: A New Strategy for Health Promotion," The New England Journal of Medicine, Vol. 279, No. 19, page 1034. November 7, 1968.
2. Address entitled, "Medical Manpower: Quantity Versus Quality," delivered at the Association of American Medical Colleges Annual Meeting in Houston, Texas. November 2, 1968.
3. Statement on Optimum Health Services, Publication S17, American Hospital Association, Chicago, 1965.
4. Butler, John J., M.D., "A Comprehensive Health Plan for a Catholic Diocese," The Journal of the American Medical Association, Vol. 206, No. 1, page 114. September 30, 1968.
5. Peabody, F.W., "Care of Patient", The Journal of the American Medical Association, Vol. 88, page 877-882. 1927.